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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|---------------|----------------------|-------------------------|------------------|
| 09/610,891 | 07/06/2000 | James McArthur | 40567 | 6712 |
| 75 | 90 02/24/2003 | | | |
| Dean H Nakamura | | | EXAMINER | |
| Roylance Abrams Berdo & Goodman LLP Suite 600 | | | YU, MISOOK | |
| 1300 19th Street NW Washington, DC 20036-2680 | | | ART UNIT | PAPER NUMBER |
| , | | | 1642 | 14 |
| | | | DATE MAILED: 02/24/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | | |
|---|--|---|--|--|--|--|--|
| | 09/610,891 | MCARTHUR ET AL. | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | MISOOK YU, Ph | | | | | | |
| The MAILING DATE of this communication app | The MAILING DATE of this communication appears n the c ver sheet with the correspondence address | | | | | | |
| Period for Reply | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status | 6(a). In no event, however within the statutory mining ill apply and will expire S cause the application to | rer, may a reply be timely filed num of thirty (30) days will be considered timely. IX (6) MONTHS from the mailing date of this communication. become ABANDONED (35 U.S.C. § 133). | | | | | |
| 1) Responsive to communication(s) filed on 04 D | <u>ecember 2002</u> . | | | | | | |
| 2a)⊠ This action is FINAL . 2b)□ Thi | | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | | | | | | | |
| 4)⊠ Claim(s) <u>35-42</u> is/are pending in the application. | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ Claim(s) <u>35-42</u> is/are rejected. | | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | | |
| 8) Claim(s) are subject to restriction and/or Application Papers | election requiren | nent. | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the | | · | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | |
| 12)☐ The oath or declaration is objected to by the Examiner. | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | |
| a) All b) Some * c) None of: | | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | | |
| Attachment(s) | | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) 🔲 | Interview Summary (PTO-413) Paper No(s) Notice of Informal Patent Application (PTO-152) Other: | | | | | |

1.

Application/Control Number: 09/610,891

Art Unit: 1642

The Examiner of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Examiner Misook Yu.

DETAILED ACTION

Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 36-43 have been renumbered as claims 35-42.

Claims 35-42 are pending and examined on merits.

Claim Rejections - 35 USC § 112

Rejection of claims under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to **enable** one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention **is moot** because the rejected claims are cancelled and the new claims no longer recites vaccine.

Claim Rejections - 35 USC § 102

Rejection of claim 23-34 rejected under 35 U.S.C. 102(b) as being anticipated by Dranoff, et al. (6,637,483, 1997) is now applied to the new claims 35-42.

Applicant argues that the instant invention as recited in the base claim relates to prostate tumor antigens which alone do not stimulate a humoral response, but when administered with a proliferation-incompetent cell in the presence of a cytokine, are effectively immunogenic and responds to that prostate tumor antigen, in part, by generating antibody therto and Dranoff et al does not teach the particular prostate tumor antigens. These arguments are not convincing for reason of record. As stated in the two previous Office action, Dranoff, et al. teach a composition comprising proliferation-incompetent prostate tumor cells cell vaccines engineered to express GM-CSF stimulating a humoral response. Note claim 17 of the prior art. The Office does not

Application/Control Number: 09/610,891

Art Unit: 1642

have the facilities and resources to provide the factual evidence needed in order to establish that the composition of the prior art does not possess the same material, structural and functional characteristics of the instantly claimed composition. In the absence of evidence to the contrary, the burden is on the applicant to prove that the claimed composition is different from those taught by the prior art and to establish patentable differences. See In re Best 562F.2d 1252, 195 USPQ 430 (CCPA 1977) and Ex parte Gray 10 USPQ 2d 1922 (PTO Bd. Pat. App. & Int. 1989).

Rejection of claims 23-29 and 30-34 rejected under 35 U.S.C. 102(a) as being anticipated by Hiserdodt, et al., (WO 98/04282, 1998) is now applied to the new claims 35-42.

Applicant argument that Hiserdodt, et al do not teach the particular prostate tumor antigens is not convincing because the various compositions of the prior art comprising proliferation-incompetent cell tumor cell vaccine engineered to express GM-CSF inherently have the nucleic acids encoding antigens with sizes ranging from 250 kD to 14 kD that do not react with PSA.

The Office does not have the facilities and resources to provide the factual evidence needed in order to establish that the composition of the prior art does not possess the same material, structural and functional characteristics of the instantly claimed composition. In the absence of evidence to the contrary, the burden is on the applicant to prove that the claimed composition is different from those taught by the prior art and to establish patentable differences. See In re Best 562F.2d 1252, 195 USPQ 430 (CCPA 1977) and Ex parte Gray 10 USPQ 2d 1922 (PTO Bd. Pat. App. & Int. 1989).

Hiserdodt, et al., thus anticipates the instantly claimed invention.

Claim Rejections - 35 USC § 112

Rejection of claims 23-34 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had **p** ssession of the claimed invention is now applied to

Application/Control Number: 09/610,891

Art Unit: 1642

the new claims 35-42. Applicant argues that the specifically recited tumor antigens are detected in Western blots in samples from patients exposed to proliferation-incompetent prostate tumor cells in presence of a cytokine and an artisan would well recognize that the inventors were in possession of the claimed invention on reading the instant specification. This argument is not convincing for reason of record because the disclosure does not teach the isolation of and assaying of tumor-associated antigens consisting of any of the recited molecules. The specification only shows the mixture of proteins. Note Figures 2-7 of the instant specification. There is no actual reduction to practice, sufficient descriptive information, such as definitive structural features of the recited tumor antigens, structural features which are critical to activity, or complete detailed description of the antigens indicating that the claimed tumor-associated antigens were indeed isolated, produced, and assayed for the uses disclosed. Thus, one skilled in the art would not recognize from the disclosure that the applicant was in possession of the claimed antigens. Contrary to applicant's argument, an artisan would not know applicant had possession of any of the recited tumor antigens other than mixture of proteins present in patient's sera treated with the proliferation-incompetent cells. See the instant abstract stating that instant invention is drawn to identify such antigens.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 09/610,891 Page 5

Art Unit: 1642

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MISOOK YU, Ph.D. whose telephone number is 703-308-2454. The examiner can normally be reached on 8 A.M. to 5:30 P.M., every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony C Caputa can be reached on 703-308-3995. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Misook Yu

February 20, 2003

SHEELA HUFF
FLISTAARY EXAMINER